Installation Instructions for Type LJ-PT Joints

NOTE: Please follow your company's safety procedures whenever working on Kadant Johnson rotary joints and read all of the instructions completely before proceeding.

Please refer to the assembly drawings supplied with your Kadant Johnson rotary joint for part identification. If you have any questions, please contact your Kadant Johnson Representative or Kadant Johnson.

STEP 1.
Check to make sure that all debris has been removed from the piping or roll before installing joint. This will eliminate carbon seal ring scoring and damage to internal joint parts which could cause unnecessary downtime and maintenance.

STEP 2.
Thread horizontal pipe into rotary joint head (2).

IMPORTANT: PIPE MUST BE STRAIGHT AND TRUE. THIS WILL PREVENT EXCESSIVE PIPE WEAR AND PIPE BREAKAGE.

STEP 3.
Using the bolts and gasket provided, fasten filler flange to the end of the journal (if applicable).

STEP 4.
Attach wear plate (16) to the face of the filler flange, using bolts (16A) and gasket (8) provided.

STEP 5.
There are two ways to compress the joint springs (7). If the joint is equipped with two threaded pins, turn the hex jam nuts inward until dimension (X) equals “set-up” dimension listed on the assembly drawing. See Figure 1. If the assembly drawing is unavailable, contact Kadant Johnson for the proper dimension.

If the joint does not have threaded pins, spring compression will take place during joint mounting. Skip to Step 7.

STEP 6.
If the joint springs are compressed as in Step 5, position a new carbon seal ring (6) in the recessed area of the wear plate (16). Slide the joint over the support rods (C) through the holes in the body lugs. Push the joint toward the roll until firm contact is made with the carbon seal ring. Install a support rod nut (B) onto each support rod (C). Continue to run the support rod nut down the support rod until they contact the joint lug. Make sure the joint is on center and perpendicular to the roll centerline. Run a second nut (A) down the support rod and jam it against the first nut (B). Remove the hex nuts that were installed in Step 5.

STEP 7.
If the joint springs have not been pre-compressed as in Step 5, position a new carbon seal ring (6) in the recessed area of the wear plate (16). Align holes in the joint lug with the support rods (C). With the nipple facing the seal ring, slide the joint over the support rods through the holes in the joint lugs. Push the joint toward the roll until it is in firm contact with the carbon seal ring. Using the support rod nuts (B), continue to move the joint towards the roll, until the correct (X) dimension is obtained. Make sure the joint is on center and perpendicular to the roll centerline. Run a second nut (A) down the support rod and jam it against the first nut.
STEP 8.
Attach piping to the joint head using Kadant Johnson flexible hose. The installation is now complete.

As the carbon seal ring wears, the springs will extend, and dimension (X) will decrease. See Figure 1. When the seal is completely worn, the nipple flange will rest against the retainer rings and the joint will leak, requiring repairs. This feature prevents metal to metal contact between the nipple and the wear plate. For seal ring replacement follow procedures in the Kadant Johnson Repair Bulletin R-2000LJ-PT.

Figure 1